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Office of the Special Commissioner, Forests, Environment, Climate Change Management

<u>Proceedings of meeting held on 07-02-2025 under the Chairpersonship of Special</u> <u>Commissioner (Forest, Environment, Climate Change Management) regarding the</u> <u>Implementation of Bengaluru Climate Action and Resilience Plan (BCAP)</u>

Date: 07.02.2025

Time: 4.00 PM - 5:00 PM

Venue: BBMP Head office

Participants:

- 1. Smt. Preeti Gehlot, IAS, Special Commissioner (Forest, Environment, Climate Change Management) BBMP
- 2. Vijaykumar Haridas, CE Lakes, BBMP
- 3. Raveendra, KREDL
- Lata Patil, KREDL
- 5. Anand, SE Electrical, BBMP
- 6. Balaji, EE MPED, BBMP
- 7. Ramesh.D, AEE Electrical, BBMP
- 8. Rajendra Naik, EE electrical, BBMP
- 9. G.Y Doddamani, EE Electrical, BBMP
- 10. Sharath Kumar, EE Electrical, BBMP
- 11. Saptak Ghosh, Senior Policy Analyst, CSTEP
- 12. Madiha, Analysis, CSTEP
- 13. Suraj, CAC Fellow, BBMP
- 14. Bhuvana, CAC Fellow, BBMP

Agenda

- 1. To discuss on the Feasibility of the floating solar panels on lakes
- 2. To discuss on the investment models for the project
- 3. To discuss on the potential collaborators for the project

CSTEP

- 1. Presented the concept note of the project
- 2. Briefed about the Potential to implement the project in Bengaluru
- 3. Discussed on the research findings that says using 10% of the lake for solar panels will not affect the ecosystem of the lake
- 4. Assessment has been done using GIS to find out the 10% of usable space on lakes
- 5. Criteria for selection of lake Constant water level throughout the season & Preferebbly man-made lakes
- 6. 3.5 acres of the solar panel on lake can generate upto 1MW of electricity
- 7. To generate 1MW of electricity, it will cost 5 to 6 Crore on water and 3 to 4 Crore on land

KREDL suggested on the following Investment models for the project

- 1. Model 1 Lease out the lake to ESCOM and purchase energy from them
- 2. Model 2 Captive BBMP will invest for the entire project for consumption of electricity by BBMP only
- 3. Model 3 SPV model -Group Captive, where BBMP will invest 26% and the rest will be invested by a third party/ bidder
- 4. Model 4 Third-party Sale (TPS) –Third party investment for the supply of power to BBMP. This attracts Cross subsidy and additional Cross subsidy of Rs.2.8 to Rs.3 per unit for BBMP to be paid to BESCOM. Cross Subsidy and Additional Cross subsidy are not applicable for the project implemented under Captive and Group-Captive mode

KREDL is willing to take up a project to set up Solar plant on the selected lake on pilot mode. The energy generated from the plant will be purchased from BESCOM at a tariff fixed by KERC

Support Needed for the project from different stakeholders

- 1. Variation of water level across season in lakes to be provided by lakes department
- 2. List of potential lakes with respect to area and continuous water availability throughout the season to be provided by Lakes Department
- 3. Support to Identify substations near lakes by BESCOM
- 4. A details economics of the project to be provided by CSTEP
- 5. Support from KREDL on necessary NOC/ permits (including NOC from KTCDA)
- 6. KREDL mentioned that they have funds and KREDL and BBMP can together work on this project
- 7. NOC is needed from BESCOM and KPTC
- 8. Approval process will take hardly 15 days from KREDL

Solar rooftop on Municipal buildings project

- 1. CSTEP briefed about the solar rooftop project
- 2. KREDL informed that they have been made the nodal agency by Government of Karnataka for installing solar rooftop on buildings
- 3. The representative of CSTEP informed that they are the agency presently working on collecting information's of all buildings under C40 Scheme and till date they have collected data from 218 buildings with a capacity of generating around 4.8 MW of power and remaining building will be completed by the end of March 2025.
- 4. KREDL asked for the details of 218 building rooftop analysis (4.8 MW) from CSTEP to call out for tender

Special Commissioner's inputs

- 1. Need permission from KTCDA department and their opinion on the project
- 2. DPR has to be shared to KTCDA
- 3. Once the economics and pre-feasibility study is done, file can be put up to the Chief Commissioner, BBMP and KREDL

Inputs given to CSTEP

- 1. Provide economics for the project including the total cost of the project and its maintenance
- 2. Mention the benefits for the BBMP in implementing this project including the cost savings
- 3. After providing economics, DPR needs to be prepared
- 4. Select a suitable location to do pilot study

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(Forest, Environment, Climate Change Management) Bruhat Bengaluru Mahanagara palike

Copy submitted to:

- 1. Hon'ble Administrator, Bruhat Bengaluru Mahanagara Palike for kind information
- 2. Chief Commissioner, Bruhat Bengaluru Mahanagara Palike for kind information

Copy to:

- 1. M/s Lakes dept.
- 2. M/s. KREDL
- 3. M/s. BESCOM
- 4. M/s. Electrical dept.
- 5. M/s. Projects dept.
- 6. M/s. CSTEP
- 7. Office copy